MSD

May 30, 2001

Mr. Femi Akindele
Residual Project Manager
Kentucky/Tennessee Section
U.S. Environmental Protection Agency
Region IV
61 Forsyth Street
Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 01, Fourth Quarter (FY01-4Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele

In accordance with paragraph 11, under Reporting Requirements, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, P.O. Box 13000, Research Triangle Park, North Coralina 27709 and received by MSD on May 25, 2001.

1. URS Corporation letter dated May 24,2001, 2 pages.

2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1 page.

3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: April 5,2001, 1 page.

4. Table 2, On-Site Meteorological Data, Sampling date, April 5,2001, 1page.

5. Table 1, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: April 5,2001, 1page.

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street Louisville, Kentucky 40203-1911 502-540-6000 www.msdlouky.org

Please advise if you have any questions concerning the attached information.

Sincerely,

Richard H. Watkins, Sr.
Special Assistant to Director

RHW/rw
Lees-01-4Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet
Mr. Rick Hogan, Division of Waste Management
G. R. Garner, Executive Director
Lees Lane File

URS

21911602.3001

May 24, 2001

Mr. Dan Sammons
Chief Chemist
Louisville Metropolitan Sewer District
4522 Algonquin Parkway
Louisville, KY 40211

Dear Dan:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on 9 April 2001 (Quarter 30).

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary for the ambient samples with the primary analytes required for submission to EPA. All ambient air samples indicate low levels of the primary analytes at a similar level compared to the last reporting quarter. Quality control data from the laboratory replicates are of high quality, however field blank levels of methylene chloride exceed those of four of the six gas well samples.

The monitoring sites for the collection were chosen based on a combination of prevailing on-site meteorology and available sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were mild (46-74 ^{o}F) with a light to moderate wind (3-14 mph) during the sampling day. Meteorological data readings on-site were not available, therefore the information displayed in Table 2 was obtained from the Louisville Airport National Weather Service Station. The ambient samples were collected 3-5 feet above ground level and were integrated over a 7-hour collection period in Summa® canisters.

The methane analysis was performed by GC/FID on a separate analytical system from the TO-15 analysis at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total nonmethane hydrocarbons prior to field deployment. The sampling procedure for ambient sample R1 qualifed due to the fact that a resident apparently moved this canister from its original location on a fence and placed it on the ground. The technician discovered the problem within 20 minutes of initially placing the canister on the fence and returned it to its

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original position on the fence. Comparison of R1 data for this sampling episode to that collected in March and October of 2000 suggests the canister being moved for a brief time did not affect the sample. All samples (including R1) were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS/Radian and project-required specifications.

The reliability of this data set can be characterized as good quality data, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The field blank canister reported positive hits for methylene chloride (.54 ppb) and toluene (.02 ppb). These concentrations are considerably less than those reported for the October 2000 sampling period. The reported results have not been blank corrected in attached tables per our standard project procedure.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. The gas monitoring wells were screened with portable survey type instruments prior to field sample collection. The results for gas well G-4 are elevated above all previously reported levels. The results for gas well G-1 are reported, but at a lower confidence level due to a potential canister leak.

URS/Radian appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux
Project Manager

Enclosure

c: Rob McCandless, URS/LOU
Project File/Task 30

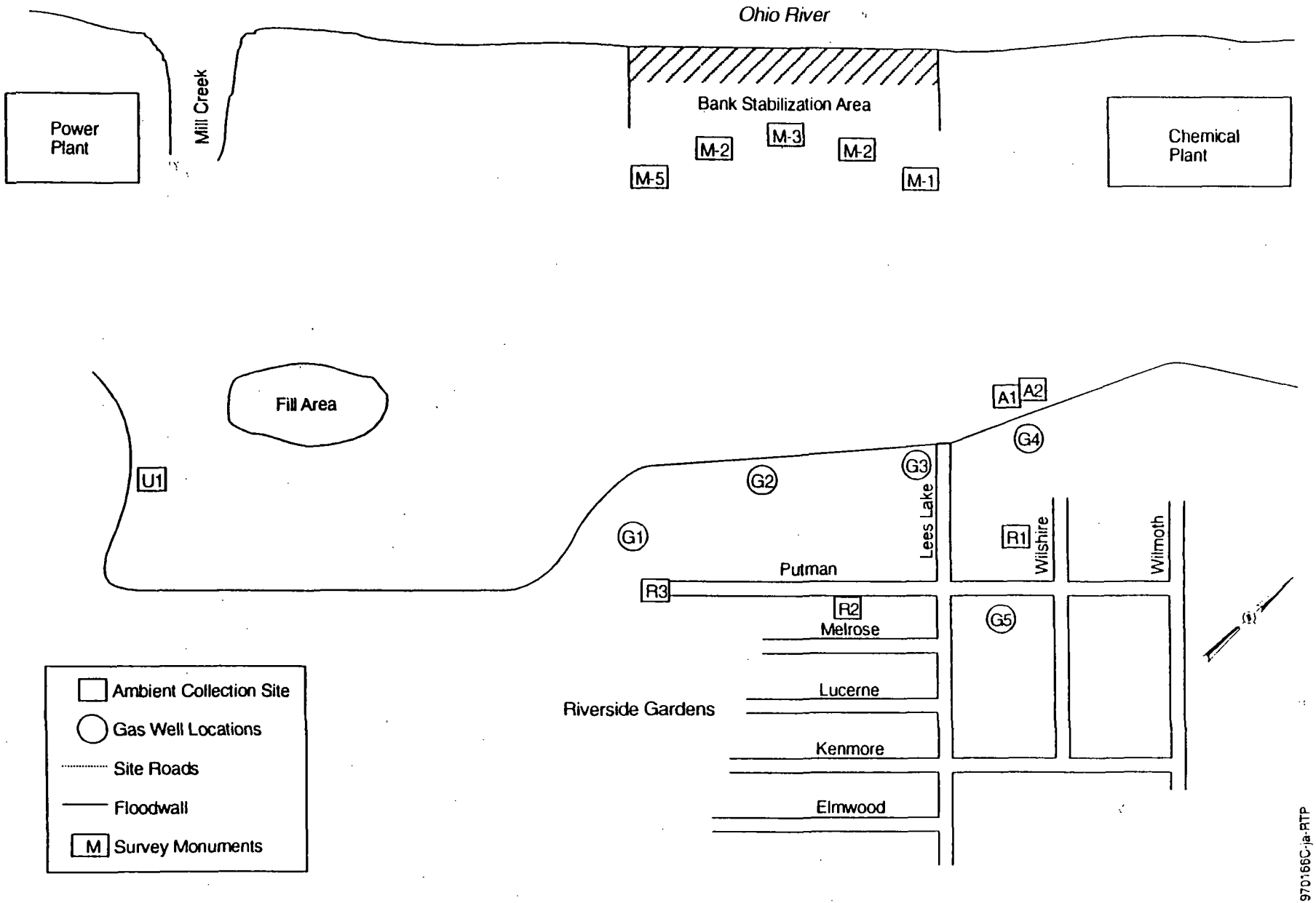

Figure 1. Lees Lane Landfill Sampling Locations

TABLE 1

TO-15 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: 5 April 2001

SAMPLING DATE: 5 APRIL 2001

	Ambient Air Samples					
Sample ID	U1	A1	A2	R1	R2	R3
Canister ID	RA2033	RA2075	RA2029	RA2034	RA2032	RA2025
Dilution Factor	3.22	2.56	2.63	2.94	3.34	4.13
Location	Upwind	On-site	On-site(dup)	Residential	Residential	Residential
Veriflow ID	A134135	A181856	A176632	A134126	A133246	A176633
Compound (ppbV)						
Benzene	0.558	0.471	0.499	0.661	0.601	0.656
Methylene chloride	0.574	0.382	0.349	0.583	0.683	0.797
Toluene	4.38	3.02	3.28	3.85	3.23	2.95
Vinyl chloride	ND	ND	ND	ND	ND	ND
Xylene (Total)	0.859	0.598	0.659	0.889	0.766	0.858
Methane (ppmV)	23.3	16.9	15.6	15.9	14.6	14.0

TABLE 2

LOCAL METEOROLOGICAL DATA

SAMPLING DATE: 5 APRIL 2001

Time	Barometric Pressure (in Hg)	Temperature (F)	Dewpoint (F)	Wind Direction (from)	Wind Speed (knots)	Observation
0600	30.18R	46	38	N	6	PTCLDY
0700	30.18S	46	39	N	6	MOCLDY
0800	30.20R	47	40	N	5	MOCLDY
0900	30.20S	52	37	CALM		CLOUDY
1000	30.20S	56	40	E	3	CLOUDY
1100	30.20S	61	46	VRBL	5	CLOUDY
1200	30.20S	64	49	SE	3	CLOUDY
1300	30.18F	70	55	VRBL	3	CLOUDY
1400	30.18F	70	55	VRBL	3	CLOUDY
1500	30.12F	73	62	SW	7	CLOUDY
1600	ND	ND	ND	ND	ND	ND
1700	30.07F	74	63	S	14	PTSUNNY

Source: National Weather Service, Louisville, Ky.

Finished 5/10/01

TABLE 3

TO-15 DATA SUMMARY FOR GAS MONITORING
WELL SAMPLES AT THE LEE'S LANE LANDFILL
SAMPLING DATE: 5 April 2001

SAMPLING DATE: 5 APRIL 2001

	Well Samples						
Sample ID	G1[a]	G2	G3	G4	G5-L	G5-R	BLANK
Canister ID	RA2026	RA0990	RA2030	RA2028	RA2035	RA2036	RA2091
Dilution Factor	2.62	2.52	2.47	2.47	2.47	2.57	2.66
Orifice	4193111	#2	#1	A193099	A193108	A193104	NA
Compound (ppbV)							
Benzene	0.660	0.044	0.266	36.2	0.133	0.309	ND
Methylene chloride	9.97	0.115	0.162	0.655	0.232	0.138	0.541
Toluene	4.36	0.461	1.88	0.721	0.769	2.82	0.02
Vinyl chloride	ND	ND	ND	12.5	0.222	ND	ND
Xylene (Total)	0.527	0.07	0.291	8.07	0.168	0.277	ND
Methane (ppmv)	14.9	11.9	17.9	5.4%	15.0	14.9	ND

[a]Final sample integrity suspect due to post test leak check. Laboratory QCER # 2938